

Zizania (aquatica, palustris) Herbaceous Vegetation [Provisional] (Wild Rice Marsh)

COMMON NAME	(Annual Wild-rice, Northern Wild-rice) Herbaceous Vegetation
SYNONYM	Wild Rice Marsh
PHYSIOGNOMIC CLASS	Herbaceous Vegetation (V)
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation (V.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland (V.A.5)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (V.A.5.N)
FORMATION	Semipermanently flooded temperate or subpolar grassland (V.A.5.N.I)
ALLIANCE	ZIZANIA (AQUATICA, PALUSTRIS) SEMIPERMANENTLY FLOODED HERBACEOUS ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 1

USFWS WETLAND SYSTEM PALUSTRINE

RANGE

Voyageurs National Park

This type is typically found in sheltered and isolated bays along the shores of the large lakes in the park.

Globally

This association is found in Iowa, Indiana, Michigan, New York, Vermont, Wisconsin, Ontario, and possibly Minnesota and Manitoba.

ENVIRONMENTAL DESCRIPTION

Voyageurs National Park

The Wild Rice Marsh is typically found in sheltered and isolated bays along the shores of large lakes. These sites are permanently flooded with water 0.5-2 meters deep. Substrate is deep muck or clay or a thin layer of muck over clay.

Globally

Stands are found in deeper, sheltered waters of slow-moving streams, protected bays, and flowage lakes, particularly at stream mouths. Water depths generally exceed 0.5 m. Substrate is rich sedimentary peat, or mucky, silty soils. A thick mat of rice stalks often covers the bottom (Harris *et al.* 1996, Voss 1972).

MOST ABUNDANT SPECIES

Voyageurs National Park

<u>Stratum</u>	<u>Species</u>
Floating-leaved	<i>Zizania palustris</i> , <i>Potamogeton</i> spp.

Globally

<u>Stratum</u>	<u>Species</u>
Floating-leaved	<i>Zizania palustris</i> , <i>Zizania aquatica</i>

CHARACTERISTIC SPECIES

Voyageurs National Park

Zizania palustris, *Potamogeton* spp.

Globally

Zizania palustris, *Zizania aquatica*

VEGETATION DESCRIPTION

Voyageurs National Park

Cover of *Zizania palustris* in this community is highly variable, ranging from 20-100%. Other emergent species such as *Scirpus acutus* and *Scirpus tabernaemontani* may be present at low cover. Submerged and floating aquatic plants are also often present at low cover. *Nymphaea odorata* and *Nuphar variegatum* are the most abundant floating aquatic plants. Depending on the site, any of the plant species present in the Midwest Pondweed Marsh may be present in the Wild Rice Marsh. This most commonly includes *Vallisneria americana*, *Sparganium fluctuans*, *Najas flexilis*, *Potamogeton gramineus*, *Potamogeton zosteriformis*, and *Potamogeton friesii*.

Globally

The marsh is dominated almost entirely by the tall emergent graminoids *Zizania aquatica* or *Zizania palustris*. Floating-leaved and submerged aquatic cover can be high, but species composition is variable. Species include *Ceratophyllum demersum*, *Nymphaea odorata*, *Nuphar variegatum*, *Potamogeton natans*, *Potamogeton zosteriformis*, *Spirodela polyrhiza*, *Utricularia vulgaris*, and others (Harris *et al.* 1996).

CONSERVATION RANK G?.

DATABASE CODE Cegl002382

COMMENTS

Voyageurs National Park

Diagnostic features of the type are open water and dominance by *Zizania palustris*. This type is analogous to Ontario's W9 (Harris *et al.* 1996).

The natural and human caused fluctuation in water levels in the large lakes of Voyageurs National Park can have a significant impact on the presence of this community. Because the Wild Rice Marsh is dependent on a specific range of water levels, extreme wet or dry years may have an effect on the presence of this community in a particular area and throughout the park. For this reason, the location of this community is constantly in flux, appearing in one place where in previous years it was absent and disappearing from where it may have been the previous year.

Globally

The natural and human caused fluctuation in water levels in lakes and rivers can have a significant impact on the presence of this community. Because the Wild Rice Marsh is dependent on a specific range of water levels, extreme wet or dry years may have an effect on the presence of this community in a particular area and throughout the park. For this reason, the location of this community is constantly in flux, appearing in one place where in previous years it was absent and disappearing from where it may have been the previous year (M. Smith personal communication 1999).

REFERENCES

- Harris, A. G., S. C. McMurray, P. W. C. Uhlig, J. K. Jeglum, R. F. Foster, and G. D. Racey. 1996. Field guide to the wetland ecosystem classification for northwestern Ontario. Ont. Minist. Nat. Resour., Northwest Sci. Tech. Field Guide FG-01. Thunder Bay, Ont. 74 p.
- Voss, E.G. 1972. Michigan Flora, Part I. Gymnosperms and Monocots. Cranbrook Institute of Science, Bloomfield Hills Bull., No. 55.

Note:

This association is found in two different map classes:

- 1) [Wild Rice Marsh](#)
- 2) [Deep Marsh Mosaic / Complex](#)